

# Francis M. Seely

seelyfrank@gmail.com ❖ (631) 672-2685 ❖ <https://github.com/seelyfrank> ❖ <https://www.linkedin.com/in/frank-seely>

❖ Web Portfolio: <https://seelyfrank.github.io/webportfolio/> ❖

## EDUCATION

**Boston University, College of Computing and Data Sciences**

**Boston, MA**

*Bachelor of Science in Data Science; Minor in Computer Science*

**Expected May 2026**

▪ 3.96 Major GPA | 3.70 Overall GPA

▪ **Relevant coursework:**

Graduate Electives: Applied Machine Learning, Natural Language Processing

Standard Coursework: Algorithms for Data Science, Database Mechanics, Programming for Data Science, Statistics and Probability Theory, Introduction to Bayesian Methods

## SKILLS

**Languages:** Python (NumPy, Matplotlib, Pandas, Scikit-learn), SQL, Java, Rust, C

**Tech Stack:** Excel and Google Sheets, Power BI, Git (GitHub), Jupyter Notebook, VSCode, Microsoft Word and PowerPoint

**Individual:** Communication, problem-solving, time management, collaboration, presentation

## PROJECTS

**Degree of Separation Simulator**

**May 2024**

- Developed a graph analysis tool to read various graph datasets, directed and undirected, and compute shortest paths using BFS (Breadth-First-Search).
- Used Stanford's extensive datasets, like email-Eu-core and epinions, to emulate real-world scenarios and confirm the connectivity of graph vertices.
- Employed Rust's performance benefits to handle large-scale graph data efficiently.

**Fraud Detection Analysis**

**Dec 2024**

- Conducted an exploratory data analysis to determine that the optimal way to preprocess the transaction data was through Scikit-learn Robust Scaler.
- Used logistic regression and the random forest algorithm for binary classification of fraudulent transactions and tuned parameters to maximize F1 scores to about 0.92

**Airport Flight Delay Exploratory Data Analysis**

**Nov 2023**

- Utilized Python to explore and model a flight log dataset to determine which factors contribute to the highest chance of a flight delay.
- Discovered that flying Southwest Airlines in the evening leads to the highest chance of having a flight delay through EDA.

## EXTRACURRICULAR EXPERIENCE

**BU Blockchain Club**

**Feb 2025**

An inclusive community committed to advancing blockchain technology through research, development, and innovation.

Hosts hackathons, workshops, and other collaborative events to promote the development of an empowering and motivated blockchain community.

**BU CDS Toastmasters Club**

**May 2024**

International nonprofit organization that promotes public speaking skills by hosting biweekly meetings where members give personal and professional speeches—both prepared and impromptu.

## AWARDS

**Winner of the College of General Studies Capstone Policy Paper**

**October 2024**

- Collaborated with six peers to create a 62-page policy proposal for harm reduction efforts in Newark, New Jersey, and gave a two-hour oral defense before three judges.

**Dean's List** | 4 terms